

Reference Counting Solutions

Reference Counting

- Briefly explain what is meant by "reference counting"
 - Reference counting is a technique for allowing different objects to share the same resource
- Describe how a "reference counter" is used to manage a shared resource
 - When the resource is initially acquired, the counter is 0
 - When an object is bound to the shared resource, the counter is incremented
 - When an object is unbound, the counter is decremented
 - When there are no remaining bound objects, the counter is 0
 - It is safe to release the (now unshared) resource

Reference Counted String

- Convert the String class from previous exercises into a reference-counted object
- Add any necessary member(s)
- Modify the constructor, destructor, copy constructor and copy assignment operator to support reference counting
 - Comment out the move operators
- Write a program and test your class
- (Optional) Implement move operators which support reference counting